

WHAT IS CLAIMED IS:

1. A computer program for a printer driver that transmits a print data to a printer connected via a network to make a print request, making a computer execute:

5 prompting a user to input document authentication information for decrypting an application document data encrypted by a predetermined application;

 creating a print data that includes the application document data and the document authentication information; and

10 transmitting the print data to the printer.

2. A computer program for a printer driver that transmits a print data to a printer connected via a network to make a print request, making a computer execute:

15 acquiring first key information predetermined between the printer and the printer driver from the printer;

 creating second key information using the first key information;

 prompting a user to input document authentication information for decrypting an application document data encrypted by a

20 predetermined application;

 creating a print data that includes the application document data encrypted and the document authentication information input;

 encrypting the print data using the second key information; and

25 transmitting the print data encrypted and the second key information to the printer.

3. The computer program according to claim 2, making the computer further execute making a request for the first key information to the printer.

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4. The computer program according to claim 2, making the computer further execute:

transmitting a connection notification to the printer at the time of being connected to the network; and

10 receiving the first key information from the printer after transmitting the connection notification.

5. The computer program according to claim 2, making the computer further execute prompting the user to input job authentication information for starting a print job, wherein

15 the print data further includes the job authentication information.

6. The printer driver program according to claim 2, making the computer further execute creating job authentication information for starting a print job from the document authentication information, wherein

20 the print data further includes the job authentication information.

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7. The printer driver program according to claim 6, wherein the job authentication information created is identical to the document authentication information.

5 8. A computer program for a printer driver that transmits a print data to a printer connected via a network to make a print request, making a computer execute:

acquiring public key information from the printer;

prompting a user to input document authentication information
10 for decrypting an application document data encrypted by a predetermined application;

creating a print data that includes the application document data and the document authentication information;

encrypting the print data using the public key information; and

15 transmitting the print data encrypted and identification information unique to a client device to the printer.

9. The computer program according to claim 8, making the computer further execute making a request for the public key
20 information to the printer.

10. The computer program according to claim 8, making the computer further execute:

transmitting a connection notification to the printer at the time of
25 being connected to the network; and

receiving the public key information from the printer after transmitting the connection notification.

11. The computer program according to claim 8, making the
5 computer further execute prompting the user to input job authentication information for starting a print job, wherein

the print data further includes the job authentication information.

12. The printer driver program according to claim 8, making the
10 computer further execute creating job authentication information for starting a print job from the document authentication information, wherein

the print data further includes the job authentication information.

15 13. The printer driver program according to claim 12, wherein the job authentication information created is identical to the document authentication information.

14. A printer that receives a print data from a client device
20 connected via a network to perform a printing process, comprising:
a document decrypting unit that decrypts an application document data encrypted by document authentication information included in the print data; and

a printing unit that prints the application document data
25 decrypted.

15. A printer that receives a print data from a client device connected via a network to perform a printing process, comprising:

a first key information creating unit that creates a first key information predetermined between the client device and the printer, and transmits the first key information created to the client device;

a decrypting unit that extracts the first key information from a second key information received from the client device, and decrypts the print data using the first key information;

a document decrypting unit that decrypts, using document authentication information included in the print data, an application document data encrypted; and

a printing unit that prints the application document data decrypted.

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16. The printer according to claim 15, wherein upon receiving a request for the first key information from the client device, the first key creating unit creates the first key information, and immediately transmits the first key information created to the client device that made the request.

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17. The printer according to claim 15, wherein upon receiving a request for the first key information from the client device, the first key creating unit creates the first key information, and transmits the first key information created to the client device that made the request when the

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printer is ready.

18. The printer according to claim 15, wherein the first key creating unit creates the first key information, and transmits the first key
5 information created to the client device when the client device is connected to the network.

19. The printer according to claim 15, wherein upon receiving the second key information from the client device, the decrypting unit
10 compares the first key information created by the first key information creating unit with the first key information extracted from the second key information, and decrypts the print data only when both of the first key information are identical.

15 20. The printer according to claim 15, wherein the decrypting unit prompts the user to input job authentication information for starting a print job, and decrypts the print data based on the job authentication information.

20 21. A printer that receives a print data from a client device connected via a network to perform a printing process, comprising:
a public key processing unit that creates a public key
information from a secret key information corresponding to identification
information unique to the client device, and transmits the public key
25 information to the client device;

a decrypting unit that decrypts the print data using the secret key information corresponding to the identification information received from the client device;

5 a document decrypting unit that decrypts, using document authentication information included in the print data, an application document data encrypted; and

a printing unit that prints the application document data decrypted.

10 22. The printer according to claim 21, further comprising a secret key creating unit that creates the secret key information upon receiving a request for the public key information from the client device, wherein
the public key processing unit creates the public key information from the secret key information created by the secret key creating unit,
15 and immediately transmits the public key information created to the client device that made the request.

23. The printer according to claim 21, further comprising a secret key creating unit that creates the secret key information upon receiving
20 a request for the public key information from the client device, wherein
the public key processing unit creates the public key information from the secret key information created by the secret key creating unit, and transmits the public key information created to the client device that made the request when the printer is ready.

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24. The printer according to claim 21, further comprising a secret key creating unit that creates the secret key information upon receiving a request for the public key information from the client device, wherein
the public key processing unit creates the public key information
5 from the secret key information created by the secret key creating unit, and transmits the public key information created to the client device that made the request upon the client device connecting to the network.

25. The printer according to claim 21, further comprising a memory
10 that stores key management information including the identification information of the client device, the secret key information, and an expiration date of the secret key information, wherein
upon receiving the identification information from the client device, the decrypting unit determines whether the secret key
15 information corresponding to the identification information is valid referring to the key management information, and decrypts the print data only when the secret key information is valid.

26. The printer according to claim 21, wherein the decrypting unit
20 prompts the user to input job authentication information for starting a print job, and decrypts the print data based on the job authentication information.